

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR Yutaka Kai	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/804,250	•	03/13/2001		837.1963/JDH	9136
21171	7590	03/17/2005		EXAMINER	
STAAS & HALSEY LLP				JACKSON, CORNELIUS H	
SUITE 700 1201 NEW	SUITE 700 1201 NEW YORK AVENUE, N.W.				PAPER NUMBER
WASHINGTON, DC 20005				2828	
				DATE MAILED: 03/17/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

1) Notice of References Cited (PTO-892)

Paper No(s)/Mail Date _

Notice of Draftsperson's Patent Drawing Review (PTO-948)

Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

6) Other:

5) Notice of Informal Patent Application (PTO-152)

Art Unit: 2828

DETAILED ACTION

Acknowledgment

1. Acknowledgment is made that applicant's Amendment, filed on 21 December 2004, has been entered. Upon entrance of the Amendment, claims 25-28 were added. Claims 1-28 are now pending in the present application.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in-
- (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).
- 3. Claims 21 and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Stayt, Jr. et al. (6389046). Regarding claim 21, Stayt, Jr. et al. disclose a light source device **Figs. 1 and 4** comprising a plurality of laser diodes **110/111**; a temperature sensor **190** provided in the vicinity of the plurality of laser diodes **110/111**; a control loop **700/790** for controlling the temperature of the plurality of laser diodes **110/111**

Art Unit: 2828

according to an output from the temperature sensor **190** and temperature control conditions for the laser diodes **110/111** to thereby control the oscillation wavelengths of the plurality of the laser diodes **110/111**; and means for compensating the temperature control conditions, **see col. 5**, **line 60-col. 6**, **line 39 and col. 7**, **line 1-col. 8**, **line 3**.

Regarding claim 22, Stayt, Jr. et al. teach all of the stated limitations, see the corresponding claims above. Also, the recitation that a wavelength control device has not been given patentable weight because it has been held that a preamble is denied the effect of a limitation where the claim following the preamble is a self-contained description of the structure not depending for completeness upon the introductory clause. Kropa v. Robie, 88 USPQ 478 (CCPA 1951).

4. Claims 21 and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Volz et al. (6501773). Regarding claim 21, Volz et al. disclose a light source device Figs. 1A and 8A comprising a plurality of laser diodes 102/832; a temperature sensor 812 provided in the vicinity of the plurality of laser diodes 102/832; a control loop for controlling the temperature of the plurality of laser diodes according to an output from the temperature sensor 812 and temperature control conditions for the laser diodes 102/832 to thereby control the oscillation wavelengths of the plurality of the laser diodes, see col. 4, lines 13-23 and col. 6, line 21-col. 7, line 13; and means for compensating the temperature control conditions, see Fig. 8C and col. 7, lines 14-30.

Regarding claim 22, Volz et al. teach all of the stated limitations, **see the corresponding claims above**. Also, the recitation that a wavelength control device has not been given patentable weight because it has been held that a preamble is

Art Unit: 2828

denied the effect of a limitation where the claim following the preamble is a self-contained description of the structure not depending for completeness upon the introductory clause. Kropa v. Robie, 88 USPQ 478 (CCPA 1951).

Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stayt, Jr. et al. (6389046) as applied to claims 21 and 22 above, and further in view of Eda et al. (5438579).). Stayt, Jr. et al. teach all of the stated limitations, except for the second temperature sensor. Eda et al. teach a second temperature sensor 42. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use as many temperature sensors as desired in order to obtain a more accurate temperature reading, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. St. Regis Paper Co. v. Bemis Co., 193 USPQ 8. Also it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Page 5

Art Unit: 2828

7. Claims 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Volz et al. (6501773) as applied to claims 21 and 22 above, and further in view of Eda et al. (5438579).). Volz et al. teach all of the stated limitations, except for the second temperature sensor. Eda et al. teach a second temperature sensor 42. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use as many temperature sensors as desired in order to obtain a more accurate temperature reading, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. St. Regis Paper Co. v. Bemis Co., 193 USPQ 8. Also it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Response to Arguments

8. Applicant's arguments filed 21 December 2004 have been fully considered but they are not persuasive. Applicant argued that there is no disclosure that the control laser element is operated at temperatures lower than or equal to ordinary temperature. In response, it is inherent that whatever temperature the control laser element is operated at to be an ordinary temperature. Since regardless of the condition or environment that the control laser element maybe in, when operated in that condition or environment, it will operate at a temperature that it would ordinarily operate at.

Allowable Subject Matter

9. Claims 1-20 and 25-28 are allowed.

10. The following is a statement of reasons for the indication of allowable subject matter: Prior art fails to teach, suggest or disclose the claimed invention having an optical filter in said control loop coupled to said plurality of laser diodes and having a transmittance periodically changing with a wavelength of light incident thereon, wherein the reference laser diode is operated at temperatures lower than or equal to an ordinary temperature, said change in said temperature control condition for said reference laser diode comprises a result of comparison between an initial set temperature and a latest set temperature, a deterioration of said temperature sensor reflects the compensation of the temperature control conditions for said laser diodes other than said reference laser diode and an initial starting wavelength of an optical signal output from said laser diodes other than said reference laser diode is controlled within a desired wavelength pull-in range.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cornelius H. Jackson whose telephone number is

Art Unit: 2828

(571)272-1942. The examiner can normally be reached on 8:00 - 5:00, Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MinSun Harvey can be reached on (571)272-1835. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

chi

MINGUN CHILDEN, ...